

REMARKS

The applicants herewith extend their appreciation to the examiner for withdrawing the final rejection, thereby postponing and hopefully entirely avoiding the necessity of filing a notice of appeal.

The examiner has now rejected claims 21 and 22 as being anticipated by Key et al (hereinafter Key) U.S. Patent 6,173,386 or, in the alternative, as being obvious over Key in view of Dockser et al (hereinafter Dockser) U.S. Patent 5,860,119. Applicants are pleased to submit revised claims 21 and 22, along with new claims 23-26, which they believe to be clearly distinguishable over Key alone or in combination with Dockser.

The Key patent is directed to a parallel processor equipped with a debug system. The processor includes an array of processing elements which are put into a debug mode of operation upon triggering of the debug system. There is no doubt that the Key processor includes some features in common with those of applicants' invention. However, there are significant, and applicants submit, patentable distinctions.

More specifically, the Key processor uses an arbiter to implement a fair arbitration policy to control multiplexing of data among port channels and to synchronize data transfers over a time division multiplexed (TDM) bus 15 (See column 8, lines 1-4). However, the patent does not contemplate the use of the arbiter for selecting a core engine based upon the operations to be performed on the data of each frame. This particular use of the arbiter is outside the normal scope of uses contemplated by Key. Yet, that is one of the important functions of the arbiter (or arbitrator) in applicants' device and process as specified in claims 21 and 22.

An important issue that is met and overcome by the present invention as now claimed is the ability to select a core engine based upon the needs required for a specific data frame. Thus, the performance characteristics of the core engine, such as encryption, searching, regular expression parsing and the like are matched with the data content of the frames more intelligently to maximize the efficiency of frame processing. This ability targets specific core engines with specific capabilities for most effectively processing each frame. This capability is not described, nor is it even remotely suggested, by the teachings of the Key patent. It is well recognized that prior art is anticipatory only if every element of the claimed invention is disclosed in a single item of prior art in the form literally defined in the claim. Jamesbury Corp. v. Litton Indus. Products, 756 F.2d 1556, 225 USPQ 253 (Fed. Cir. 1985); Atlas Powder Co. v. du Pont, 750 F.2d 1569, 224 USPQ 409 (Fed. Cir. 1984); American Hospital Supply v. Travenol Labs, 745 F.2d 1, 223 USPQ 577 (Fed. Cir. 1984). Because Key does not cover the additional features of the arbiter that enable the deep packet processing while maintaining the sequence of incoming and outgoing packets, the §102 rejection should be withdrawn.

Applicants also submit that Key in combination with Dockser does not render the claimed invention obvious. Instead, applicants have invented a system and method involving the efficient and orderly use of groups of processing engines with different capabilities and performance characteristics whereby packets are assigned to a given processing engine more intelligently based on mining of the data in the packet instead of the more limited information contained in the packet header. This is a unique attribute of the present claimed invention. Accordingly, the rejection of system claim 21 and method claim 22 as obvious over Key in view of Dockser is no longer supportable, and

the rejections should be withdrawn. The prior art applied by the examiner gave no indication of which parameters of Key or Dockser are critical, nor did it give any direction as to which of many possible choices is likely to be successful. Furthermore, it is clear that the prior art, at most, merely provides only general guidance as to the particular form of the invention or how to achieve it. This is not sufficient to support a *prima facie* case of obviousness. Accordingly, the claims define an unobvious advancement in the art and should be held to be allowable.

The Federal Circuit Court has consistently held that when obviousness is based on the teachings of multiple prior art references, some “suggestion, teaching, or motivation” should be established that would lead a person of ordinary skill in the art to combine the relevant prior art teachings in the manner claimed. See for example Tec Air, Inc. v Denso Mfg. Mich. Inc., 192 F.3d 1353, 1359-60 (Fed. Cir. 1999). This criterion has been used by the Federal Circuit for the past quarter of a century, and has been consistently applied or acknowledged by numerous panels containing every currently active member of the court.

The “suggestion to combine” requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness. See Yamanouchi Pharmaceutical Co., Ltd. v. Danbury Pharacal, Inc., 231 F. 3d 1339, 1343 (Fed. Cir. 2000). By employing this safeguard, the claims in question cannot be used as a guide through plural prior art references, combining the right references in the right way so as to deny their patentability or enforceability. The S-T-M test continues to be the benchmark for considerations regarding obviousness.

Recently engrafted onto this test used by the CAFC is the Supreme Court pronouncement in KSR International Co. v. Teleflex, Inc., 127 S. Ct. 1727 (Decided April

30, 2007) that the obviousness analysis should likewise consider whether one skilled in the art could implement a predictable variation to the prior art. If predictability is absent, this test cannot defeat patentability under 35 USC §103. Applicants respectfully submit that the invention as now claimed does not represent a “predictable variation” of the known prior art. Thus, one skilled in the art, without knowledge of the contents of this pending application, would not likely implement such a variation without the use of sufficient inventiveness to warrant patent protection under 35 USC §103(a). Accordingly, the rejection of claims 21 and 22 based on obviousness should be withdrawn.

Claim 21 has been amended to specifically indicate that an arbitrator not only maintains the sequence of the frame, but it selects a specific core engine having the unique ability to operate on the frame based upon the deep packet (data) content. New claim 23 further limits claim 21 by specifying that a given deep packet operation can be performed by more than a single core engine.

Claim 22 has now been further modified in claim 24 to specify that a given frame can be assigned to multiple deep packet operations. Claim 25 further limits claim 24 to specify that the frame can be transferred directly from one core engine memory to a second core engine memory. These limitations are not encompassed by the teachings of the cited and applied prior art.

In addition to the allowance of claims 21 and 22, the examiner is specifically requested to allow new dependent claims 23-36 as well.

The examiner’s attention is directed to the fact that Applicants are not conceding in this application that claims 21 and 22 as previously worded are not patentable over the art cited by the Examiner. Instead, these claims have been amended only for facilitating

expeditious prosecution of the subject matter and to place these claims in condition for allowance. Applicants respectfully reserve the right to pursue these and other claims in one or more continuations and/or divisional patent applications.

CONCLUSION

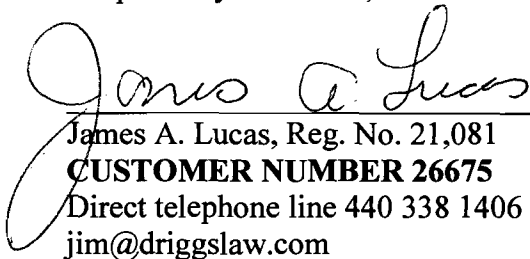
Applicants respectfully submit that the amendments to the claims now places the application in condition for immediate allowance. Accordingly, amended claims 21 and 22, the only two independent claims remaining in the application, should, therefore, be deemed to be immediately allowable. Along with them, the new dependent claims should likewise be allowable. The examiner is respectfully requested to enter this amendment and to take such additional action as may be consistent therewith.

If there are any minor matters that can easily be resolved by phone or by email, the examiner is encouraged to contact the undersigned as a step toward resolution.

Reconsideration and allowance are now respectfully requested.

Respectfully submitted,

Date: August 29, 2007


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